

General Situation

- ① Impact on U.S. ^{missile} program and national posture
 - a - Initial development
 - b - Sustained operational readiness ^{Nature of heart physics vs tech}
 - c - Contribution of space systems testing
 - d - Nature of future weapons ^{Large & Small}
 - ③ Satellite warhead for example
- ② Impact on USSR program ^{Stability of secure reference}
 - ④ Straight ballistic
- ③ Inspection & Surveillance ^{obvious examples}
 - a - Short Range Tests ^{Thrust + Pos. - Neg}
 - b - Captive tests ^{Scout-etc}
 - c - ^{Definition of space} Instrumentation on space shots ^{Inventiveness etc}
 - d - Production
 - e - Nature of future weapons
 - f - Asymmetries ^{obvious example} ^{Political most important} ^{Cheating etc}
- ④ Contribution of ~~the~~ ^{missile test} suspension ^{per se} to general broader problem of secure and realistic disarmament — & contribution to international order & peace — stability essential.

Thrust
Neg to
Russia
from
missile
view

Functional Areas of Performance

- a - CEP - # of tests ~ degradation ^{mobile} ^{fixed}
- b - Reliability - # of tests ~ degradation
- c - Functional Operability
- d - Readiness (Maintenance of hardware, crew)
- e -

510 - 9436115 947 8257

20 JAN 60

PAIGGS CEP NUMBERS

GE PAIC

2.25

1.5

.36

0.6

36.00

6.0

29.16

5.4

0.65

.36

0.6

4.41

2.1

.04

0.2

.25

0.5

.25

0.5

1.44

1.2

74.50

10

5/10

65.16

$$\Delta_{rms} = \sqrt{\frac{74.50}{10}} \approx \sqrt{7.45}$$

$$\begin{array}{r} 2.75 \\ 27 \overline{) 74.5} \\ \underline{54} \\ 205 \\ \underline{180} \\ 25 \end{array}$$

9.34

$$\Delta_{rms} = 2.75 \text{ mi}$$

$$\begin{array}{r} 2.75 \\ 27 \overline{) 74.5} \\ \underline{54} \\ 205 \\ \underline{180} \\ 25 \end{array}$$

$$\Delta_{rms} = \sqrt{\frac{9.34}{8}} = \sqrt{1.17} = 1.0$$



$$\begin{array}{r} 1.16 \\ 2.75 \overline{) 3200} \\ \underline{275} \\ 450 \\ \underline{275} \\ 1750 \end{array}$$

$$P(x,y) = \frac{1}{2\pi\sigma^2} \exp - \frac{x^2+y^2}{2\sigma^2} dx dy$$

$$= \frac{r dr d\theta}{2\pi\sigma^2} \exp - \frac{r^2}{2\sigma^2}$$

$$P(r) = \frac{r dr}{\sigma^2} e^{-r^2/2\sigma^2}$$

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- LMSB

RADIO SYSTEMS 1 BY 61 START

3/4 TO 1 BY 68

POLARIS - MWOVENED 1 1/2 POTENTIAL

TOO MUCH DEGRADATION NOVA SAME

FEELS ADDITIONAL PAYLOAD MIGHT

IMPROVE GUIDANCE RELIABILITY.

BAN STOPS DEVELOPMENT OF FORGING
STOCKPILING OF TESTED MISSILES. PRODUCT
IMPROVEMENT. TRAINING. RETROFITTING.

\$PACE FLIGHT BOOSTER TESTS
GIVE LOW RELIABILITY. RANGE
EXTENSION POSSIBLE, LOW CONFIDENCE.

\$UB LEAD TIME PACING FACTOR.

TEST BAN IN JAN 63 COULD TRAP
1200-2500 NH POLARIS. ONLY 12 PRIOR.
TEST SHOTS. SHOULD NOT STOP BEFORE JAN 63
GOV 12 MONTHS LATER.

US HOLD HAS SOLID LEAD, COULD HAVE IF STOP NOW.

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ROCKETRYNG

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- CONVAIR -

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A. IMPACT ON US PROGRAM

1. INITIAL DEVELOPMENT.

ATLAS D + RADIO IS IT, E OPERABLE

2. Sustained Operational Readiness

FALLACY TO USE NUCLEAR COERCE TO STOCKPILE. PHYSICS VS. PEOPLE.

3. Nature of Future Weapons.

Space will use larger boosters
ICBMs going smaller.

4. Impact on Russian Program

Advantage not obvious, small
thrust may be advantage to US military.

B. Inspection & Surveillance

1. Short range tests?

2. Coasting tests.

3. Definition of space. What needs

Warning system. AKA Midas, Samos.

Recon launched satellites AKA Scout.

Intent to cheat.

4. Asymmetries - Political Masses.

$$P(r > r) = 1 - e^{-r^2/2\sigma^2} = \frac{1}{2}$$

$$e^{-r^2/2\sigma^2} = \frac{1}{2}$$

$$r^2/2\sigma^2 = \ln(2)$$

$$\frac{0.693}{2}$$

$$COP = \sigma \cdot \sqrt{2 \ln(2)}$$

$$COP = \sigma \cdot (1.18)$$

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25X1X4

(1)



TESTS

AT SEA.

(2)

A SUMMARY RE FIRST BLOW - 4 - 7 US
HARD SITES, SOULY DEMAND FOR GOOD
CEPS.

(3)

SPACE RELIABILITY SHOULD POSIT
TOWARD COMMON BOOSTER TOWNS.

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min. - 45

17243
AC

BTL

ATLAS
DREAM

GE

60
61
62
63

In the Workshop

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CENTRAL INTELLIGENCE AGENCY OFFICIAL ROUTING SLIP					
TO	NAME AND ADDRESS		DATE	INITIALS	
1	DCh/Staff/SI		26 Feb	JH	
2	Ch/Staff/SI		26 Feb	HJ	
3	DAD/P		26 Feb	KHCW	
4	DAD/P				
5	AD/SI				
6					
ACTION		DIRECT REPLY	PREPARE REPLY		
APPROVAL		DISPATCH	RECOMMENDATION		
COMMENT		FILE	RETURN		
CONCURRENCE		INFORMATION	SIGNATURE		
Remarks: This is the final report of a PSAC Panel which I was on. I am unhappy with this report because: a) I think that it is ultraconservative and discusses only more immediate applications and b) my name is listed in the back although I specifically requested that my name and affiliation not be included after checking this with Grogan's office.					
FOLD HERE TO RETURN TO SENDER					
FROM: NAME, ADDRESS AND PHONE NO.					DATE
25X1A9a Approved For Release 1999/09/07 : CIA-RDP66R00546R000200100001-2					25 Feb 62
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DATE OF DOC	DATE REC'D	DATE OUT	SUSPENSE DATE	CROSS REFERENCE OR POINT OF FILING	
23 JAN 64					
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